Nitrosoethylmethylamine
(NEMA)

1971 Hoffmann and Vais reported 30 nanograms of NEMA in the mainstream smoke of an 85 millimeter non-filter U.S. blended cigarette. [1]

1973 Hoffmann, Rathkamp and Liu confirmed the findings of Hoffmann and Vais. In addition, the authors observed that the volatile nitrosamines in cigarette smoke can be reduced up to 85% by selective filtration. [2]

1977 Brunnemann, Yu and Hoffmann reported NEMA in concentrations of 0.1 to 9.1 nanograms per cigarette in the un-aged mainstream smoke of 17 commercial and experimental cigarettes and 9 to 75 nanograms per cigarette in the sidestream smoke. [3]

1982 The U.S. Surgeon General states that NEMA, which is reported in cigarette smoke in concentrations of 1 to 40 nanograms per cigarette, is "among the most potent environmental carcinogens" in the nitrosamine family. [4]

1984 The International Agency for Research on Cancer concludes that NEMA is carcinogenic in experimental animals. [5]

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References

[1] Hoffmann, D., and Vais, J., *Analysis of Volatile N-Nitrosamines in Unaged Mainstream Smoke of Cigarettes*, Abstr. 25th Tobacco Chemists' Res. Conf., 14 (1971).

[2] Hoffmann, D., Rathkamp, G. and Liu, Y.Y., *Chemical Studies on Tobacco Smoke. XXVI. On the Isolation and Identification of Volatile and Nonvolatile N-nitrosamines and Hydrazines in Cigarette Smoke, Presentation at the Third Meeting of the Analysis and Formation of N-nitroso Compounds*; International Agency for Research on Cancer (1973).

[3] Brunnemann, K.D., Yu, L. and Hoffmann, D., *Assessment of Carcinogenic Volatile N-Nitrosamines in Tobacco and in Mainstream and Sidestream Smoke from Cigarettes*, CANCER RES., 37:3218-3222 (1977).

[4] U.S. Public Health Service, *The Health Consequences of Smoking: A Report of the Surgeon General* (1972).

[5] International Agency for Research on Cancer, *Tobacco Smoking* IARC Monograph. 38 (1985 Draft).

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